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20. ABSTRACT (Continue on reverse side if necessary and identify by block number) The objective of this study was to ascertain how the management review process incident to DSARC milestone decisions affects the length of major system acquisitions and to determine what changes, if any, are needed in this process to accelerate major system acquisitions. Of the 13 programs reviewed during this study, only 2 were adversely affected by the DSARC management review process. In both cases the impact was minor and attributable to delays in issuing the actual SecDef decision or inability to schedule one of the (cont'd)		

ACCELERATING THE DECISION PROCESS IN
MAJOR SYSTEM ACQUISITION

ADA 078 326

September 1979

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EXECUTIVE SUMMARY

Acquisition cycles for some major weapon systems are now taking upwards of 12 to 15 years. DoD's concern over the lengthening acquisition cycle has led to an explicit policy statement that one objective in major system acquisition is to "minimize the time from need identification to introduction of each system into operational use."

The management review and decision process in major system acquisition has been cited as one of the primary contributors to long acquisition cycles. The objective of this study was to ascertain how the management review process incident to DSARC milestone decisions affects the length of major system acquisitions and to determine what changes, if any, are needed in this process to accelerate major system acquisitions. We examined 13 major programs which had recently been subject to a DSARC milestone review and contacted personnel from OSD, the Service headquarters organizations and cognizant program management offices.

Our major findings are as follows:

- Only 2 of the 13 programs reviewed were adversely affected by the DSARC management review process. In both cases the impact was minor and attributable to delays in issuing the Secretary of Defense milestone decision or in scheduling the DSARC meeting.
- The majority of those interviewed indicated that the DSARC management review process does not hold up the technical progress of systems under development and that elimination of the steps leading to a DSARC would do little to accelerate acquisition.
- For the most part, the management review process parallels the technical development of the system.

- Factors other than the DSARC management review process are contributing substantially to the length of the acquisition cycle. Those factors identified during the study are: inadequate and untimely program funding, changing requirements for system configuration and performance, unnecessary and duplicative testing requirements, and lack of concurrency in accomplishing the various acquisition activities.

Based on the above findings, it is concluded that the management review process incident to a DSARC decision does not have a significant impact on the length of the major system acquisition cycle. In addition, recommendations on specific aspects or steps in the management review process are not warranted because they would have little impact on the length of the acquisition cycle. In this regard, it is believed that areas such as funding, testing and concurrency hold greater promise for shortening the acquisition cycle.

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1. INTRODUCTION

MANAGEMENT REVIEW AND THE ACQUISITION CYCLE

Acquisition cycles for some major weapon systems are now extending from 12 to 15 years and beyond. In this length of time, perceived threats and technologies can often change, and the result may be the deployment of obsolete systems. DoD's concern over the lengthening acquisition cycle has led to an explicit policy statement that one objective in major system acquisition is to "minimize the time from need identification to introduction of each system into operational use."¹

The major system acquisition cycle consists of a sequence of activities leading to successful achievement of program objectives. These activities include: determination of needs, exploration and demonstration of the feasibility of alternative system design concepts, engineering development, test and evaluation, production, and deployment. Each of these activities may span several years and may be delayed by such factors as technological barriers, the adequacy and timeliness of available funding, and qualitative or quantitative changes in the program requirements. The management review aspect of the process is often cited as a primary contributor to long acquisition cycles. For example, the Defense Acquisition Executive (DAE) has stated that the single biggest deficiency in the acquisition process is the long acquisition time and that "it's the management superstructure...in Washington that's strangling the process."² In addition, the Defense Science Board (DSB) in its Report of the Acquisition Cycle Task Force, March 15, 1978, indicated that delays in system acquisition decisions are caused by introducing further complications into the process itself, such as more levels of review and approval, and recommended that the number of prescribed steps be reduced.

¹ Formal Coordination Draft of DoD Directive 5000.1 dated July 6, 1979.

² Interview in Armed Forces Journal International dated July 1978.

OMB Circular A-109 establishes policies for major system acquisition by executive branch agencies. It requires heads of executive branch agencies to approve major system acquisition programs at their inception and to decide, at stipulated key points, whether or not a program is to be continued. DoD Directives 5000.1 and 5000.2 implement the requirements of A-109 for major system acquisitions within DoD. DoDD 5000.1 defines the key decision points for the Secretary of Defense: Program Initiation (Milestone O), Demonstration and Validation (Milestone I), Full Scale Engineering Development (Milestone II), and Production and Deployment (Milestone III). DoDD 5000.2 establishes System Acquisition Review Councils at both the DoD level (DSARC) and the Service levels ((S)SARCs) to review major programs and advise the Secretary of Defense at the aforementioned milestones. Such reviews must be conducted for all major programs by the (S)SARC of the cognizant Service at Milestones I, II and III and by the DSARC at Milestones II and III. (DSARC reviews are also held at Milestone I for certain specified programs.)

The principal document used to record essential program information and to support the (S)SARC and DSARC reviews is the Decision Coordinating Paper (DCP). The processing, coordination, and review of DCPs constitute the major portion of the required management review process leading to DSARC milestone decisions.

STUDY OBJECTIVES AND SCOPE

LMI's original study objective was to determine how the management review process in major system acquisition can be accelerated. Implicit in this objective was the assumption that the management review process contributes significantly to the length of the acquisition cycle in DoD and that accelerating that process would necessarily accelerate the overall cycle. However, after the initial investigation, the validity of that assumption came into question, and the study objective was therefore revised, based on discussions between LMI and the study monitor.

The revised objective was to ascertain how the elements of management review affect the length of the acquisition cycle and to determine if any changes are needed in that area to accelerate major system acquisitions. It was agreed that the scope of the study would be limited to the management review process incident to the DSARC decision milestones in a major system's acquisition cycle. Hence, the central question became whether or not the requirements attendant to the processing, coordination, and review of DCPs at both the Service and the OSD level adversely affected the length of the major system acquisition cycle. LMI was also asked to report on any other aspects of major system acquisition identified during the study that could be lengthening the overall cycle and might call for further examination.

GENERAL RESEARCH APPROACH

There were three major phases to this study. The first phase was a review and analysis of documents pertaining to the management review process in major system acquisitions. Special attention was paid to the instructions, regulations, and policies of DoD and the Services. The purpose of this effort was to identify the management review activities in the acquisition process prescribed by existing instructions, and thereby to establish the review process required in each Service prior to a DSARC decision. Appendix A shows the required process at the OSD level. Appendices B through D detail the required review process in the Army, Navy, and Air Force, respectively.

The second phase was an examination of selected aspects of the acquisition history of current major programs in each Service. Recent exposure to the DSARC process was the primary criterion for selection. Of the 11 programs that had a DSARC milestone review in the period December 1977 through March 1979, nine were included in the LMI sample (see Table 1). The major activity of this phase was interviews with Service and OSD personnel associated with the selected programs. The organizations contacted were: OUSDR&E; the Office of the Chief of Staff, Army; the Office of the Chief of Naval

TABLE 1
PROGRAMS IN LMI SAMPLE

	<u>PROGRAMS</u>		<u>LAST DSARC MILESTONE</u>
ARMY	ASH	-	DSARC IA on Mar 23, 1976
	BLACK HAWK	-	DSARC III on Nov 30, 1976
	DIVAD GUN	-	DASRC II on Jan 5, 1978
	PERSHING II	-	DSARC II on Dec 21, 1978
	SOTAS	-	DSARC II on Aug 4, 1978
NAVY	AIM-7M	-	DNSARC II on Apr 26, 1978; OSD Program Review on Apr 27, 1978
	HARM	-	DSARC IIC on Feb 14, 1978
	LAMPS	-	DSARC IIC on Feb 16, 1978
	PHALANX	-	DSARC III on Sep 20,, 1977
AIR FORCE	AMRAAM	-	DSARC I on Nov 9, 1978
	EF-111A	-	DSARC III on Dec 12, 1978
	GBU-15	-	DSARC II on Sep 5, 1978
	KC-10A	-	DSARC II waived; AFSARC III on Aug 30, 1978

Operations; the Office of the Chief of Staff, Air Force; the Army Aviation Research and Development Command; the Army Troop Support and Aviation Readiness Command; the Naval Air Systems Command; the Naval Sea Systems Command; the Air Force Systems Command; and the Air Force Aeronautical Systems Division. Program offices within some of the above listed organizations were among those contacted.

The purpose of the second phase was to gain an understanding of the actual management review process used in each Service and its impact on the selected programs. During this phase, we attempted to answer the following questions:

1. Did the management review process adversely affect the length of the acquisition cycle?
2. If so, to what extent?
3. If warranted, how could the management review process be shortened or accelerated?

4. What other factors adversely affected the length of the acquisition cycle?

Our findings are summarized in the following chapter.

Several terms used in the second phase of the study should be explained. First, certain factors (e.g., program funding problems) or aspects of major system acquisition (e.g., the management review process) are discussed in terms of "lengthening" or "delaying" or "adversely affecting the length of" the acquisition cycle. By this we mean that had that particular aspect not been required or that factor not occurred, hardware for the program could have been delivered sooner to the user. Second, when we refer to the management review process, we mean the steps leading to a decision by the Secretary of Defense. The decision itself is not considered to be part of the management review process, but a proper exercise of management authority and responsibility in the acquisition process.

The final phase of the study was the development of conclusions and recommendations based on analysis and evaluation of the information gathered in prior phases. These will be found in Chapter 3.

2. SUMMARY OF FINDINGS

The findings presented below are categorized into two groups: those pertaining to the DSARC management review process and those pertaining to other factors or aspects of major system acquisition.

THE DSARC MANAGEMENT REVIEW PROCESS

The DSARC management review process demands a great deal of a program manager's time and generates a sizable workload for the program office. However, of the 13 programs sampled, only two appeared to have been adversely affected by the process, and in both cases the delays were minor (two to four months). Moreover, the delays were associated with issuance of the decisions after the DSARC meeting, not with the steps prior to it. One of these programs was also delayed because one of the DSARC principals had a scheduling conflict.

We talked to both military and civilian personnel in three Services and OSD about programs with diverse hardware at different stages of development. Nevertheless, there was a consensus among the interviewees that the management review process does not hold up the technical progress of systems under development, and that elimination of the review steps leading up to a DSARC decision would do little to accelerate the acquisition cycle. The timing of the DSARC process depends on progress in the technical development of the system, and that is what consumes the time. Most program managers understand the process and plan for it accordingly. Thus, we found that for the most part the management review process parallels the technical development of the system. The majority of the interviewees cited factors other than the management review process as contributors to prolonged acquisition cycles.

The length of the DSARC management review process (i.e., the number of review steps) is a function of the chain of command within each reviewing organization. To

shorten the management review process, the chain of command would have to be shortened or changed. This is an organizational consideration and hence, beyond the scope of this study.

The DSARC management review processes required by existing regulations in each Service differ, especially in terms of the number of required steps and the degree of procedural detail. The Army is the only Service to have revised its regulations and instructions in order to stay current with OSD policy in this area. In addition, both Army and Navy programs are subjected to a number of interim staff briefings not required by existing regulations. However, regardless of how cumbersome or streamlined individual Service review processes appeared, they made no significant difference in the length of the acquisition cycle for the programs reviewed because the review processes parallel other acquisition activities.

OTHER AREAS

A system's development time, and hence the length of its acquisition cycle, depends largely on the adequacy and timeliness of its funding. Seven of the 13 programs reviewed experienced funding-related problems. Over 30 percent of the interviewees indicated that inadequate program funding, including lack of funding stability, was the primary contributor to prolonged acquisition cycles. Funding-related problems can range from minor budget cuts to program stretch-outs to total elimination from the budget. Funding instability (e.g., changing estimates of planned available funds in out-years or differences in planned vs. actual funding amounts in a given year) can prevent the accomplishment of program objectives in the time originally contemplated. Many of the funding problems seem to stem from a lack of proper interaction between the DSARC process and the resource allocation process (i.e., the PPBS). Decisions made in one forum can be reversed in the other. For example, we learned that the GBU-15 program was totally eliminated from the budget three weeks after it received the DSARC Milestone III production approval.

Six of the 13 programs reviewed experienced problems with changing system requirements. Lack of agreement within both the cognizant Service and OSD on the configuration and performance parameters required was cited several times as a significant cause of long acquisition cycles. Other instances of this problem include altering a system's design during the development stage by requiring additional technical capabilities, and indecision as to a system's potential operating environment. Inconsistency in system requirements can promote program instability, divert limited resources from more important activities, and lengthen the acquisition cycle.

Five of the programs reviewed appear to have been affected by testing requirements. (We did not assess if the delays due to testing were justified.) In addition, many interviewees mentioned the large amount of testing required prior to certain major program decisions as a prime contributor to the length of the acquisition cycle. Most major weapon systems are tested by at least three different organizations: the contractor, the developing agency, and the cognizant Service's independent operational test and evaluation (OT&E) group. Much of this testing is performed sequentially. As the Defense Science Board's Acquisition Cycle Task Force stated in its 1977 summer study, "what is really desired—and desirable—is joint testing but independent evaluation."

Only a few of the programs reviewed made use of planned concurrency in the various phases of development (i.e., accomplishing acquisition activities in parallel). Acquisition activities now performed sequentially could be performed concurrently for some programs without risk to the success of the program. For example, one of the programs reviewed is planning to have the logistics support work done concurrently with initial production, instead of during the development stage. Increased use of concurrency was considered by many of the interviewees to have potential for shortening the major system acquisition cycle. The Acquisition Cycle Task Force has pointed out that concurrency is standard practice in commercial business and that a certain amount of it can contribute to the shortening of the acquisition process.

3. CONCLUSIONS AND RECOMMENDATIONS

THE DSARC MANAGEMENT REVIEW PROCESS

The Defense Science Board stated in its 1977 summer study that

...there is a normal tendency to take this elaboration of the decision process as the cause of the delay (to the acquisition process) and to assume that streamlining the process would reduce the delays. On the other hand we may thereby be confusing cause and effect: the elaboration of the decision process may be only a Parkinsonian rationalization of the overall delays which actually stem from deeper causes.

Our findings support this statement. We have concluded, based on these findings, that the management review process incident to a DSARC milestone decision does not significantly affect the length of the major system acquisition cycle. For this reason, and because each Service's review process depends on its chain of command, any recommendations to eliminate review steps would probably have little or no impact on the length of the acquisition cycle, but could adversely affect organizational matters. In addition, it is both impractical and naive to suggest that certain levels in the chain of command should not be able to exercise the prerogative of reviewing programs under their auspices. Therefore, recommendations on specific aspects of or steps in the DSARC management review and decision process of each Service are not warranted.

However, there is nothing inherent in the management review process to prevent its causing program delays in the future. Consequently, attention should be paid to keeping the process within manageable bounds. The only effects of management review on the programs in our sample were delays in issuing the Secretary of Defense decision or in scheduling the DSARC principals. We recommend that OSD continue to schedule DSARC meetings well in advance in order to permit proper planning and that OSD attempt to issue all Secretary of Defense decision memoranda within three weeks of the DSARC meeting. This last recommendation coincides with the guidance in the latest draft revision to DoD Instruction 5000.2.

The Services should keep their individual instructions on the major system acquisition process up to date and aligned with DoD policy. We suggest that OSD take action to require the Services to update their implementing instructions or regulations within four months of the effective date of any new revisions to DoD Instructions or Directives on major system acquisition.

OTHER AREAS

LMI's findings indicate that factors other than the management review process have a significant impact on the length of the acquisition cycle. Areas such as funding, testing and concurrency appear to hold greater promise for shortening the acquisition cycle. These areas involve complex issues which have been studied and debated for years. Our intention is not to recommend specific changes, but rather to suggest areas where further examination appears warranted, if shortening the major system acquisition cycle is a primary objective in DoD. It should be recognized, however, that there may be other objectives and reasons underlying the current DoD policy in these areas more compelling than shortening the acquisition cycle. The following are the factors identified during our study as having potential for shortening the acquisition cycle.

Funding

As previously noted, many of the problems related to program funding result from improper interaction between the DSARC and PPBS processes. The current OSD initiative in the area of affordability of major systems is an attempt to improve this interaction, and it should be continued. In addition, other means of increasing the stability of program funding should be explored. One such means is multi-year funding for selected high priority programs. Although this concept is apparently unpalatable to Congress at present, it is possible that some limited application of it under the proper conditions might be approved at some future time. In any event, further research into the problem of program funding stability should prove very beneficial.

Another concept that should be examined is the establishment of a reserve to be used by OSD to finance start-up work on new programs immediately after approval of a Mission Element Need Statement (MENS). As pointed out in several recent reports on the acquisition process,³ there is no mechanism for funding new major programs other than the PPBS. Since it can take upwards of 18 months for a new program to break into the PPBS budget cycle, there is a built-in lag in the acquisition process subsequent to MENS approval. Establishment of a reserve or revolving fund to be used for financing new major programs upon MENS approval could possibly accelerate the acquisition cycle. Obviously, such a reserve would need to be tightly controlled at the OSD level and would need congressional support. Nevertheless, OSD should seriously evaluate this concept and determine under what conditions it would be logical and beneficial.

Testing

The testing area was repeatedly mentioned as a prime factor contributing to long acquisition cycles. Several efforts by OSD could help in determining whether a detailed review of testing requirements is needed. For example, an examination of 10 to 20 major systems to determine if the testing program resulted in substantive system changes could provide insight into whether all of the testing is necessary. Also, it could be beneficial to find out whether testing programs are being adequately tailored to the individual system by taking into account factors such as use of mature or off-the-shelf components, and performance of testing as early as feasible in the development cycle.

The sequential aspect of testing on DoD weapon systems is another candidate for further examination. It appears that opportunities may exist to shorten the acquisition

³Report of the Acquisition Cycle Task Force: Defense Science Board; 15 March 1978.

Alternatives for Shortening the Systems Acquisition Cycle: Milestone 0 to DSARC II; Major D.T. Spencer, USAF; May, 1979.

cycle through consolidation of some testing and use of concurrent testing. OSD should evaluate this idea and determine under what conditions consolidated and concurrent testing seem reasonable. In addition, OSD should consider the possibility of allowing performance of OT&E concurrently with the start-up of production for selected systems. Because of the large investment in a program by the time it reaches OT&E, outright cancellation at this point is seldom a viable option.

Concurrency

The wise use of planned concurrency can be beneficial in shortening the acquisition cycle. OSD should take a serious look at the concept of concurrency with the aim of developing guidelines which delineate the conditions under which concurrency seems logical. Such guidelines should take into consideration factors such as the urgency of need for the specific system, the technical advancements or risks embodied in the system, and the likelihood of a change in the military threat against which the system is to be deployed.

Flexibility

Akin to the concept of concurrency is the need to use a flexible approach to acquisition. Each system is unique in some way. Why must every program's acquisition process have the same four phases? Perhaps phases could be combined or eliminated for some programs without much risk. There is a real danger that the acquisition process could become institutionalized to a point where it becomes rote, with little room for management judgment. Innovative and imaginative approaches to acquisition should be encouraged. Tailoring the process to fit the specific needs and circumstances of a program could provide a means to shorten the acquisition cycle. One of the programs reviewed during this study is utilizing some of these concepts and tailoring its acquisition strategy to the specific circumstances of the program in order to shorten its acquisition cycle. It appears that these efforts have been successful to date. OSD has also recognized the potential benefits to be derived from a flexible approach to acquisition in

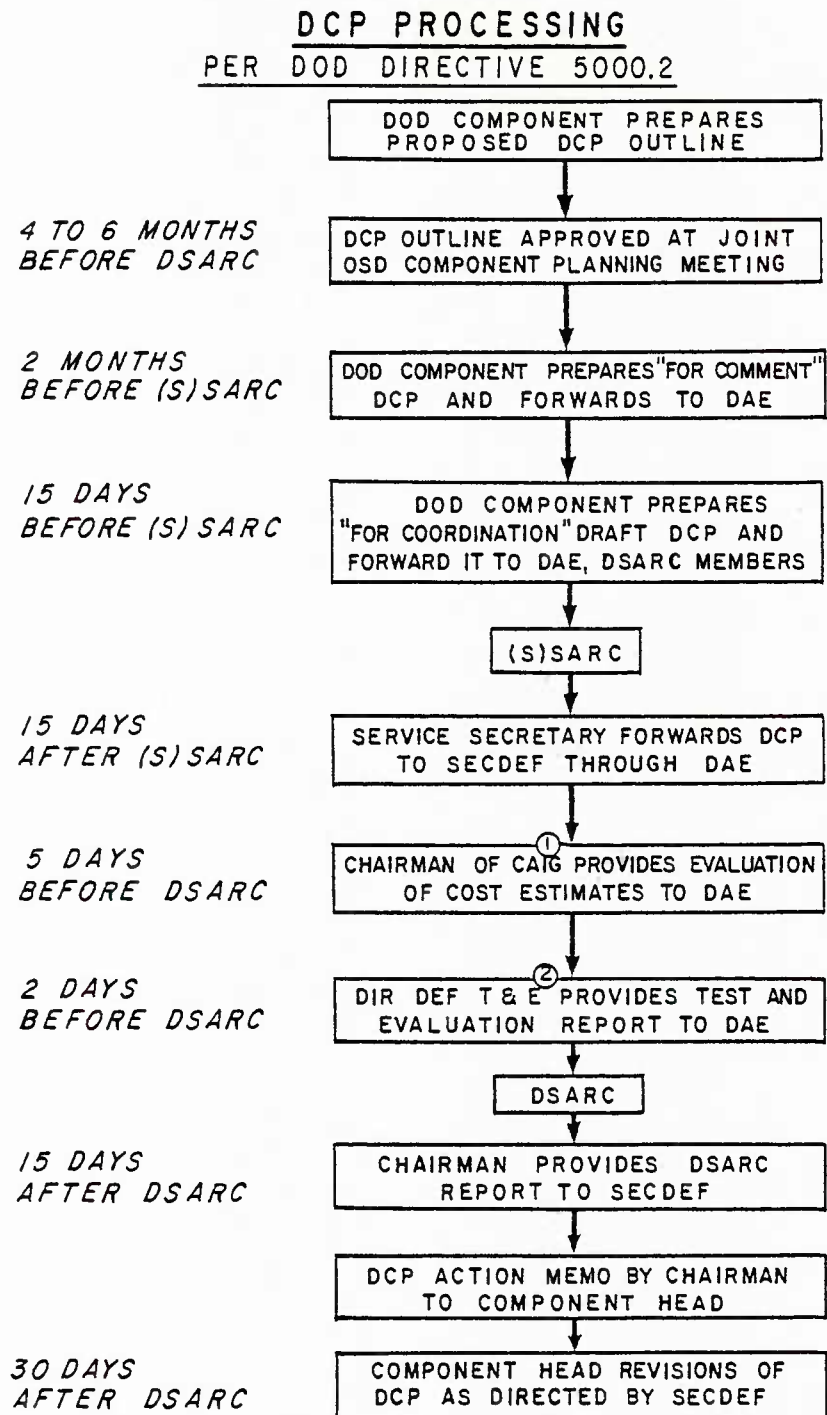
its latest draft revision to DoD Instruction 5000.2. Opportunities to shorten the acquisition cycle such as the ones mentioned above should be actively pursued.

APPENDIX A

DCP PROCESSING AT THE OSD LEVEL

As previously indicated, the review, processing, and coordination of the DCP constitutes a large portion of the management review incident to a key program decision. Enclosure 2 to DoD Directive 5000.2 delineates specific requirements for the processing of DCPs. Exhibit A-1 displays the DCP processing steps required by DoD Directive 5000.2 and shows the timeframe specified for each step. Exhibit A-1 is self-explanatory. However, it should be noted that the required steps displayed in Figure A-1 only address the processing of DCPs at the OSD level. Additional review steps are required by each of the individual military services. The required review processes for each of the military services are discussed in Appendices B, C and D.

EXHIBIT A-1



① CAIG = COST ANALYSIS IMPROVEMENT GROUP

② DIR. DEF. T & E = DIRECTOR DEFENSE TEST AND EVALUATION

APPENDIX B

THE REQUIRED ARMY REVIEW PROCESS

Exhibit B-1 depicts the review process required by existing regulations prior to a Milestone decision on major programs in the Army. This chart was developed by LMI based on a review of relevant Army regulations. Exhibit B-2 is a listing of the Army regulations reviewed during this study. There is one Army regulation that consolidates all of the various review requirements into one document. This is Office of the Deputy Chief of Staff for Research, Development and Acquisition (ODCSRDA) Regulation 15-14, dated 1 August 1978, and entitled, ASARC/DSARC Procedures. The chart in Exhibit B-1, including the time frames associated with each action, was derived from ODCSRDA Regulation 15-14.

A preliminary chart depicting the Army review process was reviewed with the Systems Review and Analysis Office in ODCSRDA. Based on this review, several minor changes were made to the chart. Exhibit B-1 is the resultant chart of the Army review process and has been reviewed and verified by cognizant Army personnel. In addition, the Army's required review process as shown in Exhibit B-1 conforms to the requirements of DoD Directive 5000.2.

EXHIBIT B-1

ARMY DCP PROCESSING PER
ODCSRDA REG 15-14

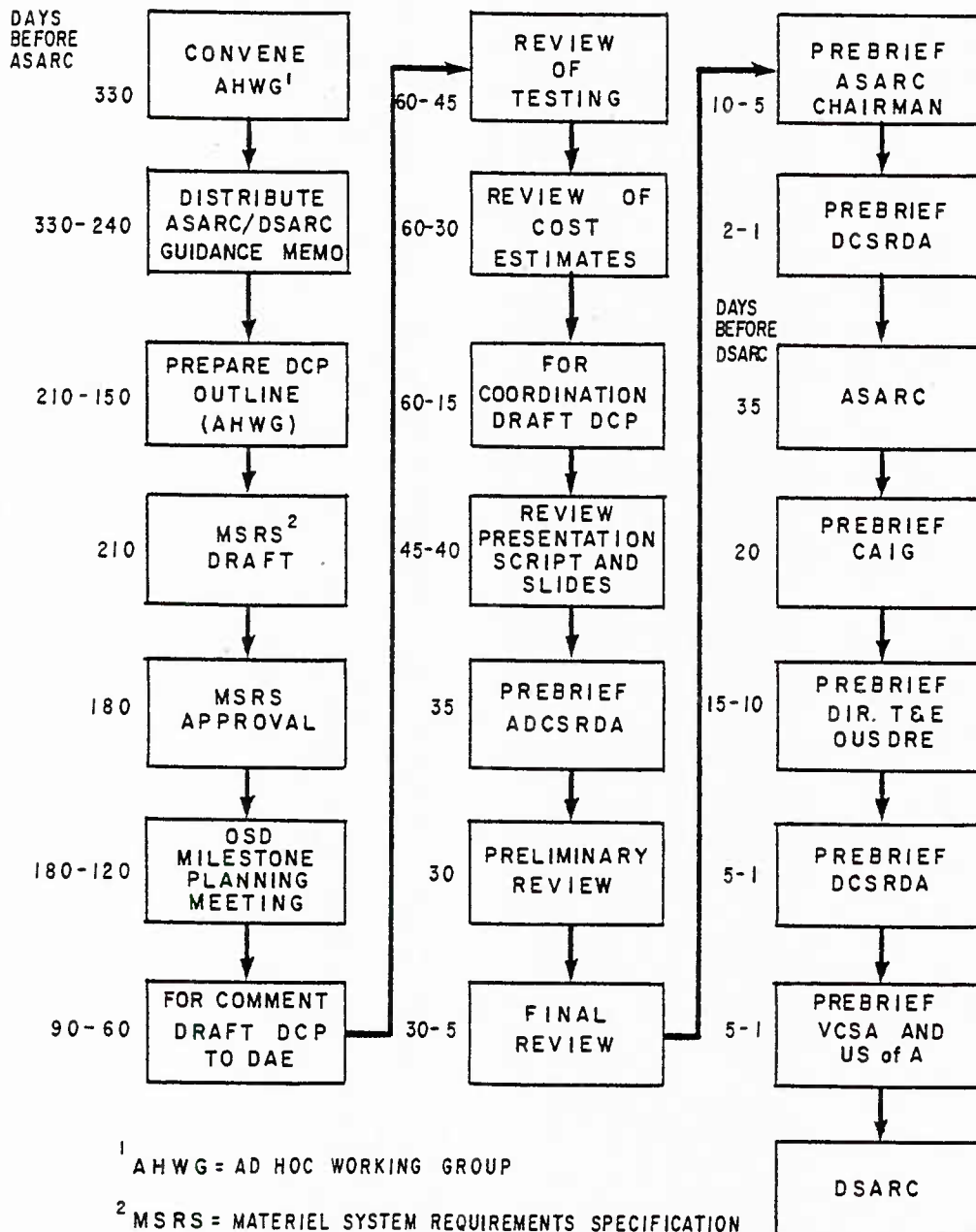


EXHIBIT B-2

ARMY REGULATIONS,
POLICIES AND PROCEDURES REVIEWED DURING THE STUDY

- AR 11-4, System Program Reviews, 13 January 1975, HQ Department of the Army.
- AR 15-14, System Acquisition Review Council Procedures, 1 April 1978, HQ Department of the Army.
- AR 15-29, Research, Development, and Acquisition Committee, 10 August 1977, HQ Department of the Army.
- AR 70-1, Army Research, Development, and Acquisition, 1 February 1977, HQ Department of the Army.
- AR 70-17, System/Program/Project/Product Management, 11 November 1976, HQ Department of the Army.
- AR 715-6, Proposal Evaluation and Source Selection, 21 September 1970, HQ Department of the Army.
- AR 715-11, Army Procurement Management Review Program, 15 August 1978, HQ Department of the Army.
- AR 1000-1, Basic Policies for Systems Acquisition, 1 April 1978, HQ Department of the Army.
- ODCSRDA Reg. 15-14, ASARC/DSARC Procedures, 1 August 1978, Department of the Army, Office of the Deputy Chief of Staff for Research, Development and Acquisition.

APPENDIX C

THE REQUIRED NAVY REVIEW PROCESS

Exhibit C-1 represents the required review process incident to a Milestone decision on major Navy programs. This chart was developed by LMI based on a review of existing Navy instructions and policy memoranda concerning the major system acquisition process. Exhibit C-2 lists the Navy instructions and policy memoranda reviewed during this study. Based on our review, we concluded that OPNAV Instruction 5000.46, dated 10 March 1976, and entitled Decision Coordinating Papers (DCPs), Program Memoranda (PMS) and Navy Decision Coordinating Papers is the only document that consolidates the various review requirements contained in other instructions. Consequently, the chart in Exhibit C-1, including the time frames associated with each action, was derived from OPNAV Instruction 5000.46.

Exhibit C-1 was reviewed with cognizant personnel in the Office of the Assistant Secretary of the Navy (Research, Engineering and Systems) in order to ensure that it was correct. We were advised that our chart was an accurate representation of the Navy DCP/DSARC review process prescribed by current Navy instructions. In addition, we contacted the Office of the Chief of Naval Operations (OPNAV) and were told that OPNAV Instruction 5000.46 was still in effect and was still the operative instruction on the Navy's DCP/DSARC review process.

OPNAV Instruction 5000.46 does not correspond exactly with the requirements of DoD Directive 5000.2. Specifically, the sequencing and timing of the "For Comment" draft DCP, the "For Coordination" draft DCP and the actual (S)SARC meeting specified in OPNAV Instruction 5000.46 differ from the DoD Directive 5000.2 requirements. The main reason for this difference is that the OPNAV Instruction was issued prior to the current revision of the DoD Directive and has not yet been revised. The OPNAV office

responsible for OPNAV Instruction 5000.46 acknowledged that it does not correspond with the requirements of DoD Directive 5000.2 and indicated that the OPNAV Instruction is being rewritten. However, since DoD Directive 5000.2 is currently being revised by OSD, the revision to OPNAV Instruction 5000.46 is being held in abeyance pending the outcome of the OSD effort.

EXHIBIT C-1

NAVY DCP and DSARC REVIEW PROCESS

PER OPNAVINST. 5000.46

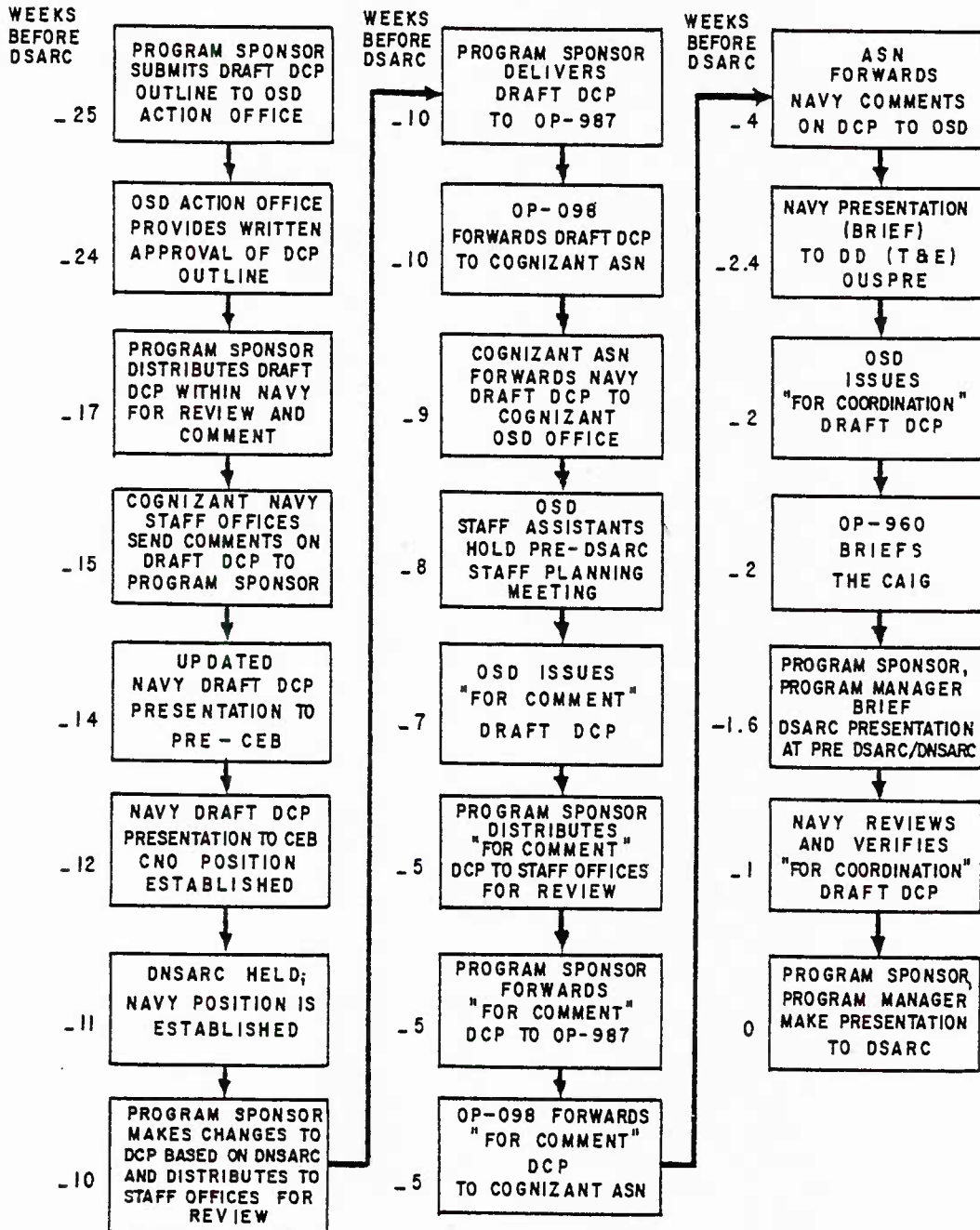


EXHIBIT C-2

NAVY REGULATIONS,
POLICIES AND PROCEDURES REVIEWED DURING THE STUDY

SECNAVINST 5000.1, System Acquisition in the Department of the Navy, 13 March 1972, Department of the Navy, Office of the Secretary.

SECNAVINST 5000.1A, System Acquisition in the Department of the Navy, 17 November 1978, Department of the Navy, Office of the Secretary.

SECNAVINST 5420.172B, Establishment of the Department of the Navy Systems Acquisition Review Council (DNSARC), 18 May 1976, Department of the Navy, Office of the Secretary.

OPNAVINST 5000.42A, Weapon Systems Selection and Planning, 3 March 1976, Department of the Navy, Office of the Chief of Naval Operations.

OPNAVINST 5000.46, Decision Coordinating Papers (DCPs), Program Memoranda (PMs) and Navy Decision Coordinating Papers (NDCPs), 10 March 1976, Department of the Navy, Office of the Chief of Naval Operations.

OPNAVINST 5050.30A, CNO/VCNO Briefings in the Navy Decision Center (NADEC), 23 August 1974, Department of the Navy, Office of the Chief of Naval Operations.

OPNAVINST 5420.2J, Chief of Naval Operations Executive Board, 10 November 1973, Department of the Navy, Office of the Chief of Naval Operations.

NAVMATINST 4720.1, Approval of Systems and Equipments for Service Use (ASU), 13 December 1974, Department of the Navy, HQ Naval Material Command.

NAVMATINST 5000.19A, Quarterly Project Status Reviews, 4 May 1976, Department of the Navy, HQ Naval Material Command.

NAVMATINST 5000.19B, Weapons Systems Acquisition Program Review and Appraisal Within the Naval Material Command, 32 February 1978, Department of the Navy, HQ Naval Material Command.

NAVMATNOTE 5000, Naval Material Command DSARC Review Group, 10 January 1973, Department of the Navy, HQ Naval Material Command.

NAVMATNOTE 5000, Review Process for Major Acquisition Projects, 9 December 1974, Department of the Navy, HQ Naval Material Command.

NAVAIRNOTE 5420, Establishment of the NAVAIR Acquisition Program Review Board, 7 September 1976, Department of the Navy, Naval Air Systems Command.

NAVSEAINST 5400.16, Administrative and Operating Procedures for the Program Appraisal and Internal Review System, 24 March 1975, Department of the Navy, Naval Sea Systems Command.

DNSARC Procedures, 26 July 1976, Department of the Navy, Office of Program Appraisal.

Ser 09/1001, Staffing Requirements for Major (DCP) Acquisition Programs, 4 January 1977, Department of the Navy, Chief of Naval Operations

Ser 96D21, OP-96 Action Officer Responsibilities for Navy Acquisition Programs, 25 June 1976, Department of the Navy, Chief of Naval Operations.

Ser 96D21, Program Presentations Requiring CNO/VCNO Decisions, 15 September 1976, Department of the Navy, Chief of Naval Operations.

APPENDIX D

THE REQUIRED AIR FORCE REVIEW PROCESS

Exhibit D-1 illustrates the required Air Force review process incident to a milestone decision for a major program. In order to develop this chart, it was necessary for LMI to obtain and review various Air Force regulations, policies, and procedures concerning the major system acquisition process. Exhibit D-2 lists the Air Force material reviewed during this study.

LMI concluded that Headquarters Operating Instruction (HOI) 800-1, DCP/DSARC Preparation, dated 21 March 1973, was the one Air Force document that best consolidated and illustrated the required review process. We constructed a chart based on HOI 800-1. This chart was then reviewed with personnel in the Directorate of Development and Programming, Management Policy Division, USAF, to verify that it was correct. At that time we were advised that our chart was not an accurate representation of the current DCP/DSARC review process used in the Air Force. The Management Policy Division then provided us with a draft HOI on Procedures for the Air Force Systems Acquisition Review Council (AFSARC). We were informed that this draft HOI is a fair representation of the review process for Air Force Major programs, and that HOI 800-1, which was issued in 1973, does not correspond to DoD Directive 5000.2, which was issued in 1977. Consequently, the chart in Exhibit D-1 was developed based on the draft HOI. The Air Force required review process as shown in Exhibit D-1 conforms to the requirements of DoD Directive 5000.2.

AIR FORCE DCP PROCESSING PER DRAFT HOI: PROCEDURES FOR AFSARC

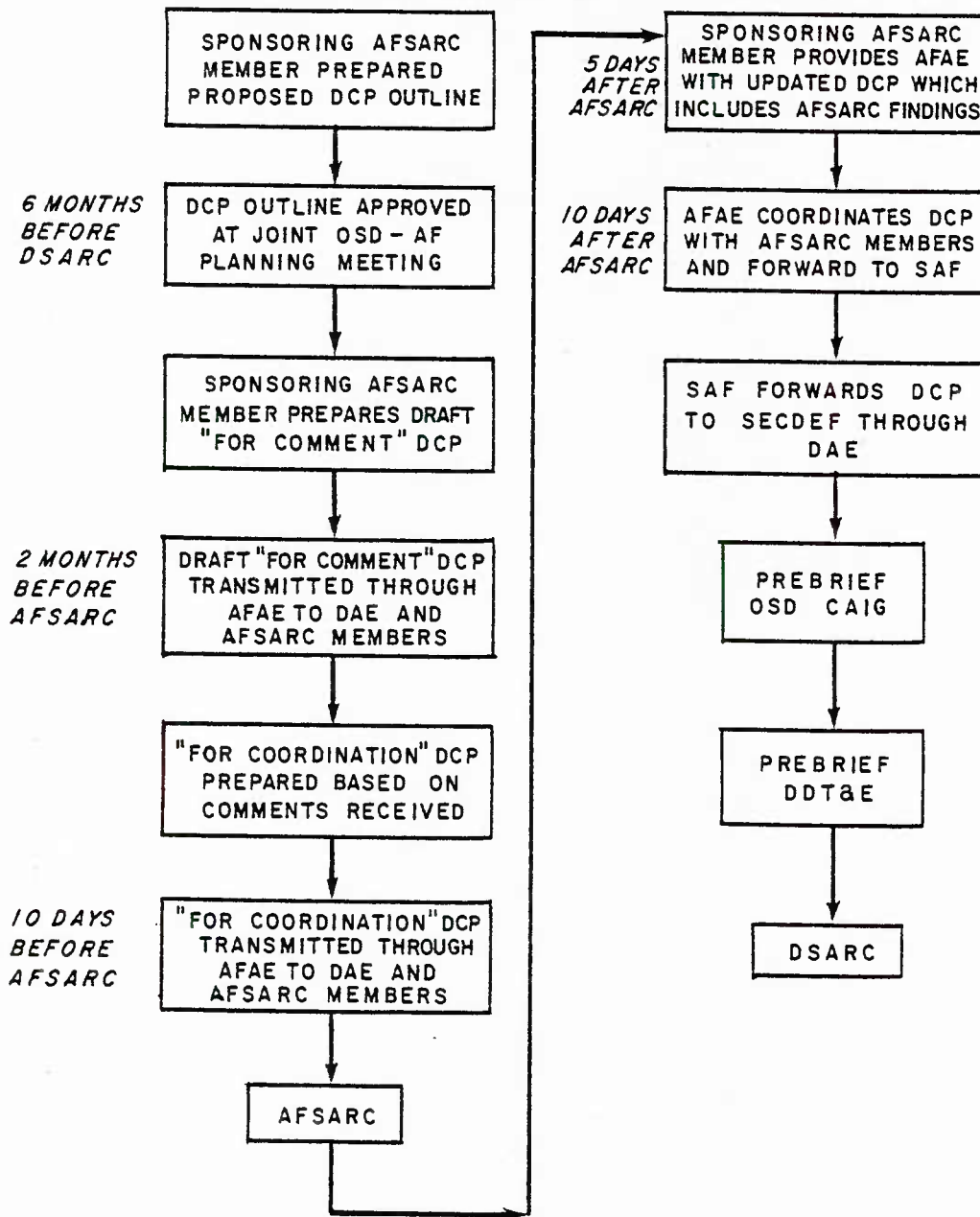


EXHIBIT D-2

AIR FORCE REGULATIONS,
POLICIES AND PROCEDURES REVIEWED DURING THE STUDY

- AF Regulation 70-16, Contract Management in Major Program Acquisition, 2 January 1974, Dept. of the Air Force, HQUSAF.
- AF Regulation 800-2, Acquisition Program Management, 14 November 1977, Dept. of the Air Force, HQUSAF.
- Headquarters Operating Instruction 11-16, Responsibilities, Functions and Procedures Pertaining to Development Concept Papers (DCPs), 2 April 1968, HQUSAF.
- Headquarters Operating Instruction 21-18, The Air Force Board Structure, 12 March 1979, Dept. of the Air Force, HQUSAF.
- Headquarters Operating Instruction 800-1, DCP/DSARC Preparation, 21 March 1973, Dept. of the Air Force, HQUSAF.
- Draft Headquarters Operating Instruction on Procedures for the Air Force Systems Acquisition Review Council (AFSARC).
- AFSC Regulation 27-1, Program Direction, 6 June 1977, Dept. of the Air Force, HQAFSC.
- AFSC Regulation 70-7, AFSC Procurement Evaluation Panel, 16 March 1978, Dept. of the Air Force, HQAFSC.
- AFSC Regulation 800-1, Command Review of Systems Acquisition Programs and Test Resources, 22 June 1976, Dept. of the Air Force, HQAFSC.
- AFSC Regulation 800-17, Program Advisory Boards, 15 April 1974, Dept. of the Air Force, HQAFSC.
- AFSC Regulation 800-18, Joint Operational and Technical Review (JOTR), 20 September 1974, Dept. of the Air Force, HQAFSC.
- AFSC Regulation 800-13, Secretary of the Air Force Program Review/Program Assessment Review/Command Assessment Review (SPR/PAR/CAR) Direction, 30 December 1977, Dept. of the Air Force, HQAFSC.
- AFSC Pamphlet 800-3, A Guide for Program Management, 9 April 1976, Dept. of the Air Force, HQAFSC.